

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE MODIFICATION AND INSTALLATION OF PEDESTRIAN AUDIBLE SIGNALS AND REPLACEMENT OF THE CONTROLLER AND CABINET AT THE INTERSECTION OF MD 97 (GEORGIA AVENUE) AND WINDHAM LANE IN MONTGOMERY COUNTY.

INTERSECTION OPERATION

THE INTERSECTION SHALL OPERATE USING 5 NEMA PHASES THE INTERSECTION WILL BE MODIFIED TO INCLUDE AUDIBLE PEDESTRIAN SIGNALS TO CROSS ALL FOUR APPROACHES OF THE INTERSECTION.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7318
MR. DENNIS MCMAHON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7336
MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304
MR. AUGIE REBISH, UTILITY ENGINEER
PHONE: (301) 513-7350
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. BOBBY GONZALES, TRAFFIC ENGINEER - MCDPW&T
PHONE: (240) 777-8761

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
9042	CONTROLLER ASCII WITH TELEMETRY	EA	1
9044	CONTROLLER CABINET, SIZE 6	EA	1
9547	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: R10-4(1) (9"X12") R10-4C MOD. (9"X12") D-3(1) (VAR. X 16")	SF EA EA EA	65 4 4 4

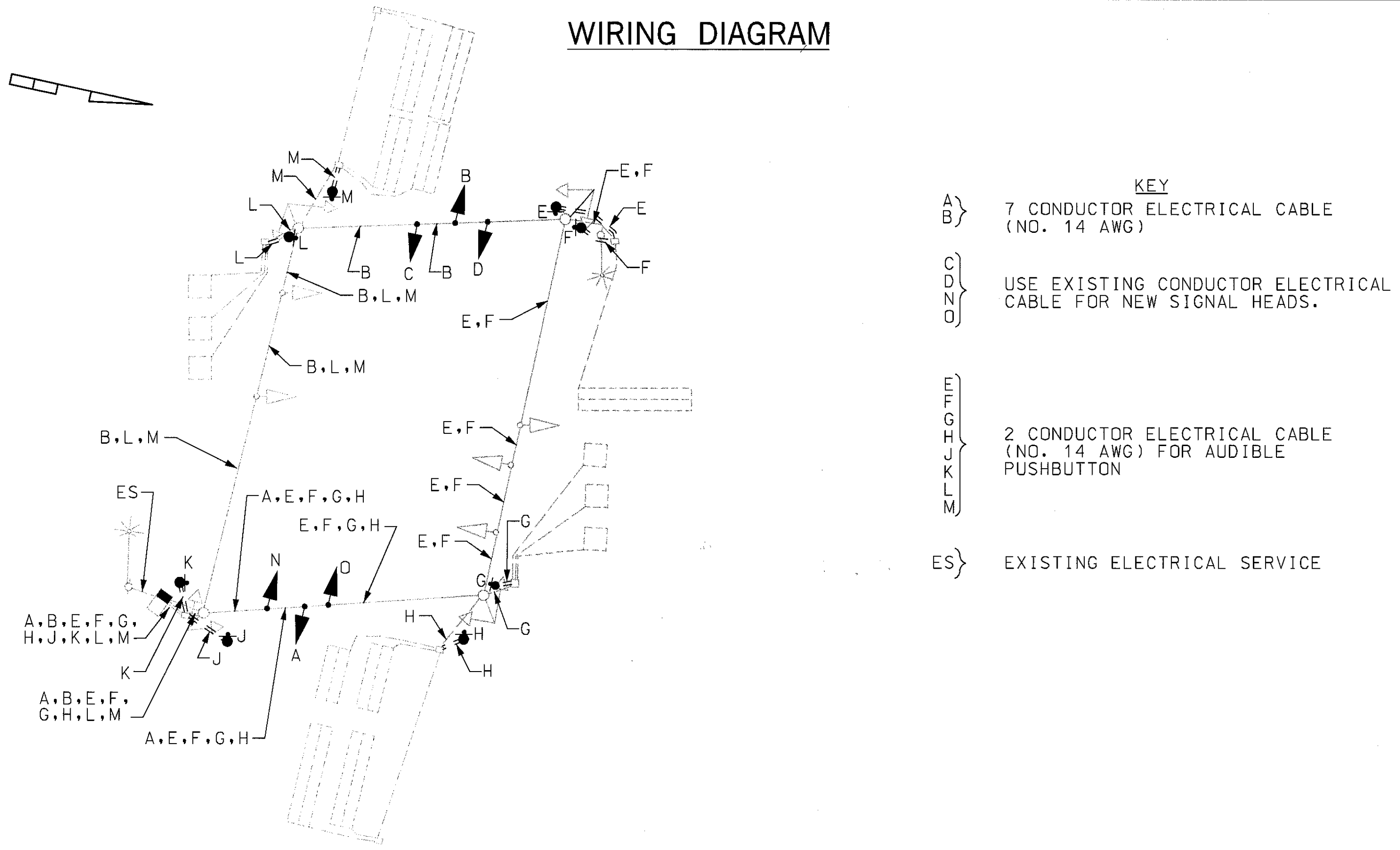
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
2002	TEST PIT EXCAVATION	CY	4
8001	CONCRETE FOUNDATION	CY	6
8018	4 FOOT BREAKAWAY PEDESTAL POLE	EA	8
8019	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
8037	2 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	150
8045	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS	EA	1
8054	INSTALL GROUND MOUNT SIGN	SF	8
8055	INSTALL OVERHEAD SIGN	SF	58
8075	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	22
8081	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	1300
8084	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	290
8094	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
NEG.	2 WIRE NAVIGATOR PUSH BUTTON STATION	EA	8
NEG.	2 WIRE NAVIGATOR CENTRAL CONTROL UNIT	EA	1
NEG.	DETECTABLE WARNING SURFACE (SURFACE APPLIED)	SF	50

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
	CONTROLLER AND CABINET - BASE MOUNT	EA	1


WIRING DIAGRAM




PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)
PHASE 2 AND 5	R	R	GG	GG	G	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	YG	YG	G	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	G	G	R	R	G	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	G	G	G	R	G	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	Y	Y	Y	R	Y	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	R	G	G	G	R	G	R	DW	DW	DW	DW	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	G	R	G	R	DW	DW	DW	DW	DW	DW	FL/DW	FL/DW
PHASE 3 ALT CHANGE	R	R	R	R	R	Y	Y	Y	R	Y	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	G	R	G	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	Y	R	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	G	R	G	DW	DW	DW	DW	WK	WK	DW	DW
PED CLEARANCE	R	R	R	R	R	R	R	R	G	R	G	DW	DW	DW	DW	FL/DW	FL/DW	DW	DW
PHASE 4 ALT CHANGE	R	R	R	R	R	R	R	R	Y	R	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

SHA# MD33MA55/285 TO# AT287-31

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
MD 97 (GEORGIA AVENUE)
AT WINDHAM LANE

**SABRA, WANG & ASSOCIATES, INC.**
1504 JOH AVENUE
SUITE 100
BALTIMORE, MD 21227
(410) 787-8564
WWW.SABRA-WANG.COM

DRAWN BY: L. YEH	F.A.P. NO.	TS NO.	SHEET NO. 2 OF 2
CHECKED BY: S. SMITH	S.H.A. NO.	214C-P	
SCALE: 1" = 20'	COUNTY: MONTGOMERY	T.I.M.S. NO.	
DATE: APRIL 2004	LOG MILE: 15009702.78	E979	

FILE: \05-11\Task-651.dwg 15/04/2004 16:10